

Royal Society submission: Great British Energy Bill

October 2024

1.1. The Royal Society is the national academy of science for the UK. Its Fellows include many of the world's most distinguished scientists working across a broad range of disciplines in academia, industry, charities and the public sector. The Society draws on the expertise of the Fellowship to provide independent and authoritative advice to UK, European and international decision-makers.

1.2. The Society's fundamental purpose, reflected in its founding Charters of the 1660s, is to recognise, promote, and support excellence in science and to encourage the development and use of science for the benefit of humanity. Our strategic priorities therefore are to promote excellence in science; to support international collaboration; and to demonstrate the importance of science to everyone.

2.1. The Royal Society welcomes the creation of Great British Energy as a mechanism for affecting the societal shift that must occur to decarbonise our energy system, if we are to meet our net zero obligation and live within planetary boundaries.

2.2. While recognising the need for the rapid decarbonisation of the UK energy system using existing technologies, the Royal Society recommends that provisions and distinctions are made for the development of, and investment in, technologies required to meet net zero over multi-decadal timescales. Investment should take a long-term perspective to ensure the technologies crucial to achieving net zero by 2050, but which have long development periods, receive appropriate support. Such technologies could include, for example, the need for long-term, large-scale electricity storage capabilities¹. Due regard for the mix and scale of storage technologies will also be important to ensure electricity costs are affordable at the point of consumption.

2.3. The Royal Society further recommends that GBE formally be set up to have due regard for wider short- and long-term environmental consequences, such as biodiversity impacts, which may result from their decisions and activities as outlined under Section 3. It is also important that the creation and development of technologies or solutions fit within the broader energy environment.

2.4. The Royal Society, as the UK's National Academy of Sciences, stands ready to provide scientific input and advice on matters related to energy, biodiversity, and climate, in support of the Government's mission to '*Make Britain a clean energy superpower*'.

For further information or queries, please contact public.affairs@royalsociety.org

¹ The Royal Society. 2023. Large Scale Electricity Storage. Accessible here: royalsociety.org/electricity-storage